Section-A

Multiple Choice Questions (MCQ's)

Q-01: Choose the correct answer for each from the given option.

(i) If R = {(1,2), (2,3), (3,4), } then RangeR = ________
(a) {1,2,3} (b) {2,3,4} (c) {1,2,3,4} (d) None of these

(ii) If log2 x = 3, then x = ________
(a) 6 (b) (c) 10 (d) 5

(iii) $\frac{a^m}{a^n}$ = ________
(a) a^{m+n} (b) $a^{m\times n}$ (c) a^{m-n} (d) $a^{\frac{m}{n}}$

(iv) The degree of the polynomial x2 + xy2 + y is :________
(a) 2 (b) 3 (c) 4 (d) 1

(v) Order of $\begin{bmatrix} \sqrt{3} + 2 \\ 5 + 7 \end{bmatrix}$ is ________
(a) 2 x 2 (b) 1 x 2 (c) 2 x 1 (d) None of these

(vi) (x – 6) (x – 4) = ________
(a) x^2 - 10x – 24 (b) x^2 + 10x – 24
(c) x^2 + 10x – 24 (d) x^2 - 10x + 24

(vii) If A = $\begin{bmatrix} 6 & 4 \\ 3 & 2 \end{bmatrix}$. then |A| = ________
(a) 0 (b) 2 (c) 4 (d) 6

(viii) $ax^2 + bx + c = 0$, will remain quadratic equation, if ________
(a) a ≠ 0 , b = 0 and c = 0 (b) A = 0 , b ≠ 0 and c ≠ 0
(c) A ≠ 0 and c = 0 (d) Both (a) and (c)

(ix) The L.C.M of x^3 - y^3 and x6 – y6 is ________
(a) x^3 - y^3 (b) x^3 + y^3 (c) x6 + y6 (d) x6 - y 6

(x) If the sum of two angles 90° then they are called ____
(a) Vertical Angles (b) Adjacent Angles
(c) Complementary Angles (d) Supplementary Angles

(xi) If the vertex and one arm of two angles are common, they are called ___
(a) Vertical Angles (b) Adjacent Angles
(c) Complementary Angles (d) Supplementary Angles

(xii) A quadrilateral having only one pair of opposite sides parallel is called ___
(a) Rhombus (b) Trapezoid
(c) Rectangle (d) Parallelogram

(xiii) In a right angle triangle the side opposite to right angle is called __
(a) Perpendicular (b) Hypotenuse
(c) Altitude (d) Base

(xiv) The point through which bisectors of angles of a triangle pass is called ___
(a) Incenter (b) Orthocenter (c) Centroid (d) None of these

(xv) 1 + $\tan^2 45°$ = $\sec^2$ ________
(a) 30° (b) 45° (c) 60° (d) 90°

(xvi) Sin30° = cos ________
(a) 30° (b) 45° (c) 60° (d) None of these

(xvii) A line which intersect a circl at one and only one point is called _____ of the circle.
(a) Radial segment (b) Secant (c) Semi – circle
(d) Tangent

(xviii) If a, b and c are in continued proportion, ten ________
(a) $ab = c^2$ (b) $a^2 = bc$ (c) $ac = b^2$
(d) None of these

(xix) The mean proportion to 75 and 12 are
(a) ± 20 (b) ± 10 (c) ± 30 (d) ± 40

(x A series contains values 15,19,13,11,14,16, its median is :
(a) 12 (b) 13 (c) 14 (d) 4.5